Claims

1. Method of monitoring wavelengths of optical signals travelling in an optical fibre, characterized in the steps of:

conducting the optical signals to a narrowband optical filter which can be controlled by a control signal and in which the interdependence is known between the wavelength of the optical signal obtained from the output of the filter and the control signal,

converting the optical signal obtained from the output of the optical filter into an electric signal,

adjusting the filter by changing the control signal in such a way that the window formed by its pass band will slide within the wavelength range being examined,

determining the filter control signals corresponding to the peak values of the obtained electric signal, and determining the wavelengths corresponding the control signals.

2. Method as defined in claim 1, characterized in that the filter control signal is an electric signal.

3. Method as defined in claim 1, characterized in that the dependence of the wavelength obtained from the filter output on the filter control signal is stored in a memory in advance.

4. Method as defined in claim 3, characterized in that the determination of filter control signals corresponding to peak values of the electric signal and the determination of corresponding wavelengths based on these is performed based on the dependence stored in the memory.

5. Method as defined in claim 1, characterized in that the filter control signal is adjusted so that the window formed by the pass band will slide over the wavelength range being examined.

6. Method as defined in claim 1, characterized in that the filter control signal is adjusted so that the window formed by the pass band will be transferred to the desired wavelength.

7. Arrangement for monitoring wavelengths of optical signals travelling in an optical fibre, characterized in that it includes:

a narrowband optical filter (32), which can be controlled by filter tuning, and in which the interdependence is known between the wavelength of the control signal and the wavelength of the optical signal obtained from the filter output, and to the input of which the optical signals to be examined

are conducted,

a light detector (33), which is connected to the output of the optical filter (32) and which converts the optical signal into an electric signal,

a control electronics circuit (34), which is connected on the one hand to the control input of the filter to give a filter tuning signal and on the other hand to the light detector to receive the electric signal given by it.

8. Arrangement as defined in claim 7, characterized in that the control electronics circuit forms a control signal, the value of which scans sliding over the entire control range.

9. Arrangement as defined in claim 7, characterized in that the control electronics circuit forms a control signal, the value of which obtains desired values only.

10. Arrangement as defined in claim 7, characterized in that it also includes storing means (35) storing the interdependence between the control signal and the wavelength of the optical signal obtained from the filter output.

11. Arrangement as defined in claim 8 or 9, characterized in that the control electronics circuit includes a microprocessor, which from the electric signal obtained from the light detector determines filter control signals corresponding to its peak values as well as the corresponding wavelengths based on these.

12. . Arrangement as defined in claim 7, characterized in that it includes an optical directional coupler (31), which separates a part of the light power travelling in the optical fibre to be conducted to the input of the controllable filter.